WHAT IS CLAIMED IS:

1. A recording apparatus comprising:

laser-light emitting means for emitting laser light to a loaded disk;

detecting means for detecting light reflected from the disk;

driving means for rotating the disk;

determination means for determining the type of the loaded disk;

driving control means for controlling the driving means according to the result of determination performed by the determination means, so as to perform rotation driving at a constant angular velocity or at a constant linear velocity; and

recording control means for executing recording for the disk in a state in which the driving control means performs rotation driving control.

2. The recording apparatus according to Claim 1,

wherein the detecting means comprises reflected-light detecting means for detecting the amount of light reflected from the disk, and

the determination means determines the type of the loaded disk according to the detection output of the

reflected-light detecting means.

3. The recording apparatus according to Claim 2, wherein the driving control means controls the driving means so as to perform rotation driving at a constant linear velocity when the disk has a reflectivity higher than a predetermined reflectivity, and so as to perform rotation driving at a constant angular velocity when the disk has a reflectively lower than the predetermined reflectivity.

4. The recording apparatus according to Claim 1, wherein the driving control means controls the driving means so as to perform rotation driving at a constant linear velocity when the loaded disk is a recordable disk, and so as to perform rotation driving at a constant angular velocity when the disk is a rewritable disk.

5. The recording apparatus according to Claim 1,

wherein the detecting means comprises data detecting means for reading data from the disk according to the light reflected from the disk and for detecting type identification information indicating the type of the disk in the data read from the disk, and

the determination means determines the type of the loaded disk according to the detection output of the data

detecting means.

6. A recording apparatus comprising:

reading means for reading data from a loaded disk;

determining means for determining the type of recording from data recorded into the disk, according to the reading output of the reading means;

driving means for rotating the disk;

driving control means for controlling the disk according to the determination output of the determination means so as to perform rotation driving at a constant angular velocity or at a constant linear velocity; and

recording control means for executing recording for the disk in a state in which the driving control means performs rotation driving control.

7. The recording apparatus according to Claim 6, wherein the determination means determines whether a track recorded into the disk is closed, and, when the track is not closed, determines the type of recording according to packet information recorded into the disk.

8. The recording apparatus according to Claim 7, wherein the driving control means controls so as to perform rotation driving at a constant angular velocity when the

determination means determines that the packet information indicates fixed-length packet recording, in which the data length of a packet is fixed, and so as to perform rotation driving at a constant linear velocity when the determination means determines that the packet information indicates variable-length packet recording, in which the data length of a packet is variable.

9. A recording apparatus comprising:

reading means for reading data from a loaded disk;

detecting means for detecting substituted-area-identification information indicating whether a substituted area is used in the disk, according to the reading output of the reading means;

driving means for rotating the disk;

driving control means for controlling the driving means according to the substituted-area-identification information so as to perform rotation driving at a constant angular velocity or at a constant linear velocity; and

recording control means for executing recording for the disk in a state in which the driving control means performs rotation driving control.

10. The recording apparatus according to Claim 9, wherein the driving control means controls according to the

substituted-area-identification information so as to perform rotation driving at a constant angular velocity when a detective area is found and so as to perform rotation driving at a constant linear velocity when a defective area is not found.

11. A recording apparatus comprising:

input means for inputting at least a recording command from the outside;

driving means for rotating the disk;

determination means for determining whether initialization is required for a loaded disk, when the recording command is input; and

driving control means for controlling the driving means according to the result of determination performed by the determination means, so as to perform rotation driving at a constant angular velocity or at a constant linear velocity.

12. The recording apparatus according to Claim 11, wherein the driving control means controls so as to perform rotation driving at a constant linear velocity when the initialization is performed and so as to perform rotation driving at a constant angular velocity when recording processing for recording data is performed.

13. A recording apparatus comprising:

reading means for reading data from a loaded disk;

detecting means for detecting recording-start-position information according to data read by the reading means;

driving means for rotating the disk;

driving control means for controlling the driving means according to the recording-start-position information so as to perform rotation driving at a constant angular velocity or at a constant linear velocity; and

recording control means for executing recording for the disk in a state in which the driving control means performs rotation driving control.

14. The recording apparatus according to Claim 13, wherein the driving control means controls so as to perform rotation driving at a constant linear velocity when a recording-start position is located more inside than a predetermined radial position, and so as to perform rotation driving at a constant angular velocity when the recording-start position is located more outside than the predetermined radial position.

15. The recording apparatus according to Claim 13, wherein the driving control means controls to perform rotation driving at a constant linear velocity when a

recording-start position is located more inside than a predetermined radial position and starts recording, and switches the control so as to perform rotation driving at a constant angular velocity when a recording position is shifted to a position more outside than the predetermined radial position.

16. A recording method comprising:

a determination step of determining the type of a loaded disk;

a step of controlling according to the result of determination so as to rotate the disk at a constant angular velocity or at a constant linear velocity; and

a step of executing recording in a state in which the disk is rotated.

17. The recording method according to Claim 16, wherein the determination step comprises

a step of emitting laser light to the loaded disk; and

a reflected-light detecting step of detecting light reflected from the disk, and

the disk is rotated according to the result of detection in the reflected-light detecting step at a constant angular velocity or at a constant linear velocity.

18. The recording method according Claim 17, wherein the reflected-light detecting step comprises a step of detecting the amount of light reflected from the disk.

19. The recording method according to Claim 17, wherein the reflected-light detecting step comprises a step of reading type-identification information indicating the type of the disk from the loaded disk.

20. The recording method according to Claim 17, wherein whether the loaded disk is a recordable disk or a rewritable disk is determined in the determination step.

21. A recording method comprising:

a recording-type detecting step of detecting the type of recording of data recorded into a disk;

a step of controlling according to the type of recording used for the disk so as to rotate the disk at a constant angular velocity or at a constant linear velocity; and

a step of executing recording for the disk in a state in which the disk is rotated.

22. The recording method according to Claim 21,

wherein the recording-type detecting step comprises a step of determining whether a track recorded into the disk is closed or not.

23. The recording method according to Claim 22,

wherein the recording-type detecting step further comprises a step of detecting packet information recorded into the disk, and

control is performed according to the packet information so as to rotate the disk at a constant angular velocity or at a constant linear velocity when it is determined that the track is not closed.

24. A recording method comprising:

a step of reading from a loaded disk substituted-area-identification information indicating whether the disk is provided with a substituted area;

a step of rotating the disk at a constant angular velocity or at a constant linear velocity according to the substituted-area-identification information; and

a step of executing recording for the disk in a state in which the disk is rotated.

25. A recording method comprising:

a determination step of determining whether

initialization is required for a loaded disk, when a recording command is input from the outside; and

a control step of controlling according to the result of determination performed in the determination step, so as to rotate the disk at a constant angular velocity or at a constant linear velocity.

26. The recording method according to Claim 25, wherein, in the control step, control is performed so as to rotate the disk at a constant linear velocity when the initialization is performed, and so as to rotate the disk at a constant angular velocity when recording processing for recording data is performed.

27. A recording method comprising:

a step of reading from a loaded disk recording-start-position information for the disk;

a step of controlling according to the recording-start-position information so as to rotate the disk at a constant angular velocity or at a constant linear velocity; and

a step of executing recording for the disk in a state in which the disk is rotated.

28. The recording method according to Claim 27, wherein control is performed so as to perform rotation

driving at a constant linear velocity when a recording-start position is located more inside than a predetermined radial position, and so as to perform rotation driving at a constant angular velocity when the recording-start position is located more outside than the predetermined radial position.

29. The recording method according to Claim 27, wherein control is performed to perform rotation driving at a constant linear velocity when a recording-start position is located more inside than a predetermined radial position and recording is started, and the control is switched so as to perform rotation driving at a constant angular velocity when a recording position is shifted to a position more outside than the predetermined radial position.